REMARKS

Status of claims

Claim No.	History	Status
1-14	Filed – November 21, 2003 Rejected – May 16, 2005	Cancelled – August 12, 2005
15	Filed – November 21, 2003 Objected – May 16, 2005 Amended – August 12, 2005	Allowed – August 23, 2005
16-18	Filed – November 21, 2003 Rejected – May 16, 2005	Cancelled – August 12, 2005
19	Filed – November 21, 2003 Objected – May 16, 2005 Amended – August 12, 2005	Allowed – August 23, 2005
20-23	Filed – November 21, 2003 Rejected – May 16, 2005	Cancelled – August 12, 2005
24	Filed – November 21, 2003 Objected to – May 16, 2005 Amended – August 12, 2005	Allowed – August 23, 2005
25	Filed – November 21, 2003 Objected to – May 16, 2005	Allowed – August 23, 2005
26	New – August 12, 2005 Rejected – August 23, 2005 Amended herein	Pending
27-28	New – August 12, 2005 Rejected – August 23, 2005	Pending
29-30	New – August 12, 2005 Objected to – August 23, 2005	Pending
31	New – August 12, 2005 Rejected – August 23, 2005 Amended herein	Pending
32-33	New – August 12, 2005 Rejected – August 23, 2005	Pending
34-35	New – August 12, 2005 Objected to – August 23, 2005	Pending

11

Claim rejections per 35 USC §102

Further to telephone discussions with the Examiner of September 23 and 28, 2005, this paper provides an amendment to claims 26 and 31 to avoid being anticipated by the disclosure in Gras (US patent 4,787,213). It is submitted that the amended claims continue to be fully supported by the disclosure.

In particular the claims now claim the storage of sensed values repeatedly in a database for use in the analysis of existing and incipient equipment problems by using an active monitor to track the trend of selected operating parameters.

Regarding claims 26 and 31:

> The amended claims 26 and 31 require that there be a database in which sensed values of operating parameters and corresponding time values are repeatedly stored. These comprise the historical record for the selected operating parameters which are used to check for equipment problems. It is submitted that Gras in Fig. 2, units 100-105 does not disclose the storage of this sort of information. Further, the logic of Fig. 2 relies solely on only five data – a defrost signal (on or off), an indicator whether the compressor is running or not, T_E, T_A and T_{Dsoll}. At no point is there an examination of the recent history of any of these parameters. The logic is controlled solely by the latest values of these five parameters.

Regarding claims 27 and 32:

> Gras (col2 2-3, lines 28-5) discloses an improved method of controlling the expansion valve *"after an extended stoppage of a refrigeration system"* (col 2, lines 35-36 and again at col 2, line 50). It is submitted that the special type of operation contemplated here is designed to avoid excessive work by the compressor after a long period of idleness – *"If the refrigerating system is now put into operation the motor which drives the compressor must perform considerable compression work ..."* (Gras, col 2, lines 39-42). The disclosure in the subject application regarding the long compressor off-cycle deals with an entirely different situation. In normal operation, refrigeration compressors cycle on and off. Such compressors only do enough work needed to cool the refrigeration chamber adequately and then they shut down – *"Periodically ... the compressor 106 runs to maintain or increase the pressure difference ..."* (subject application, page 20, lines 4-5). However, if the compressor is failing (or has failed entirely) the off portion of these cycles increases. It is this event which the subject refrigeration monitor seeks to check (subject application, table (d) page 27). The distinction is highlighted by observing that the special type of operation in Gras takes place when the
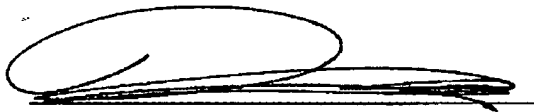
compressor is running after a stoppage; claims 27 and 32 in the subject application check for an equipment problem which manifests itself in an overly-long compressor off-cycle, one that occurs while the compressor is not running.

Regarding claims 27-30 and 32-35:

It is submitted that if the amended claims 26 and 31 are found to be allowable, then the dependent claims 27-30 and 32-35 are also allowable without amendment.

Applicants respectfully submit that the pending claims 26-35 are in condition for allowance and seek an early allowance thereof.

Executed at Victoria, British Columbia on February 16, 2006

David Wiebe
Inventor/applicant

13